IN THE CLAIMS

CLAIMS 1-28 (Canceled).

CLAIM 29 (Previously Presented) A method of probing an electronic device by contacting the electronic device with a plurality of flexible contact elements, the method comprising the steps of:

providing a first substrate corresponding to an area of the electronic device to be probed, said substrate having a front surface;

mounting and connecting a second substrate to the front surface of the first substrate, said second substrate having a plurality of flexible contact elements bonded to and extending from a surface thereof;

urging the first substrate and the electronic device towards one another so that the flexible contact elements make contact with a surface of the electronic component the flexible contact elements have an original shape;

the flexible contact elements flex and wipe the surface of the electronic component when the flexible contacts contact the electronic components; and

the flexible contact elements substantially compliantly respond when the flexible contact elements are withdrawn from contacting the electronic component.

CLAIM 30 (Currently Amended) A method according to any one of claims 29, 33, 34, 36, 37, 42, 43 or 53 to 60, wherein the electronic device is a semiconductor wafer.

CLAIM 31 (Previously Presented) A method according to claim 30, wherein the area is a plurality of integrated circuits on the semiconductor wafer; and the flexible contacts make contact with the plurality of die sites all at once.

CLAIM 32 (Currently Amended) A method according to any one of claims 29, 33, 34, 36, 37, 42, 43 or 53 to 60, wherein the area of the electronic device is a portion of a surface area of the electronic device.

CLAIM 33 (Currently Amended) A method of probing an electronic device by contacting the electronic device with a plurality of flexible contact elements, the method comprising the steps of:

providing a first substrate corresponding to an area of the electronic device to be probed, said substrate having a front surface;

mounting and connecting a second substrate to the front surface of the first substrate, said second substrate having a plurality of flexible contact elements bonded to and extending from a surface thereof;

the flexible contact elements substantially compliantly respond when the flexible contact elements are withdrawn from contacting the electronic component;

urging the first substrate and the electronic device towards one another so that the flexible contact elements make contact with the electronic component, and the electronic device is a printed circuit board.

CLAIM 34 (Currently Amended) A method of probing an electronic device by contacting the electronic device with a plurality of flexible contact elements, the method comprising the steps of:

providing a first substrate corresponding to an area of the electronic device to be probed, said substrate having a front surface;

mounting and connecting a second substrate to the front surface of the first substrate, said second substrate having a plurality of flexible contact elements bonded to and extending from a surface thereof;

the flexible contact elements substantially compliantly respond when the flexible contact elements are withdrawn from contacting the electronic component;

urging the first substrate and the electronic device towards one another so that the flexible contact elements make contact with the electronic component, and the electronic device is a packaging substrate.

CLAIM 35 (Currently Amended) A method according to ~~claim~~ any one of claims 29, 33, 34, 36, 37, 42, 43 or 53 to 60, wherein the flexible elements are probe elements.

CLAIM 36 (Previously Presented) A method of probing an electronic device by contacting the electronic device with a plurality of flexible contact elements, the method comprising the steps of:

providing a first substrate corresponding to an area of the electronic device to be probed, said substrate having a front surface;

mounting and connecting a second substrate to the front surface of the first substrate, said second substrate having a plurality of flexible contact elements bonded to and extending from a surface thereof;

urging the first substrate and the electronic device towards one another so that the flexible contact elements make contact with the electronic

component, and the flexible elements further includes a protuberance at an end thereof.

CLAIM 37 (Currently Amended) A method of probing an electronic device by contacting the electronic device with a plurality of flexible contact elements, the method comprising the steps of:

providing a first substrate corresponding to an area of the electronic device to be probed, said substrate having a front surface;

mounting and connecting a second substrate to the front surface of the first substrate, said second substrate having a plurality of flexible contact elements bonded to and extending from a surface thereof;

the flexible contact elements substantially compliantly respond when the flexible contact elements are withdrawn from contacting the electronic component;

urging the first substrate and the electronic device towards one another so that the flexible contact elements make contact with the electronic component, and the flexible elements are wires disposed on the surface of the second substrate, the wires are shaped so that a free end thereof laterally moves when pressed against the area of the electronic device.

CLAIM 38 (Currently Amended) A method according to any one of claims 29, 33, 34, 36, 37, 42, 43 or 53 to 60, wherein there are electrical connections between the second substrates and the first substrate.

CLAIM 39 (Currently Amended) A method according to any one of claims 29, 33, 34, 36, 37, 42, 43 or 53 to 60, wherein the first substrate is a space transformer.

CLAIM 40 (Currently Amended) A method according to any one of claims 29, 33, 34, 36, 37, 42, 43 or 53 to 60, wherein the electronic device is a semiconductor wafer; and the flexible contact elements of the second substrate contact individual semiconductor dies on the semiconductor wafer.

CLAIM 41 (Currently Amended) A method according to any one of claims 29, 33, 34, 36, 37, 42, 43 or 53 to 60, wherein the electronic device is a semiconductor wafer; and the flexible contact elements of the second substrate contacts at least one integrated circuit on the semiconductor wafer.

CLAIM 42 (Currently Amended) A method of probing an electronic device by contacting the electronic device with a plurality of flexible contact elements, the method comprising the steps of:

providing a first substrate corresponding to an area of the electronic device to be probed, said substrate having a front surface;

mounting and connecting a second substrate to the front surface of the first substrate, said second substrate having a plurality of flexible contact elements bonded to and extending from a surface thereof;

the flexible contact elements substantially compliantly respond when the flexible contact elements are withdrawn from contacting the electronic component;

urging the first substrate and the electronic device towards one another so that the flexible contact elements make contact with the electronic component so that a free end of the flexible contact elements laterally move when pressed against the area of the electronic device, and the second substrate is aligned to the first substrate by a socket which

electrically interconnects the first substrate and the second substrate in a substantially fixed position with respect to each other.

CLAIM 43 (Currently Amended) A method of probing an electronic device by contacting the electronic device with a plurality of flexible contact elements, the method comprising the steps of:

providing a first substrate corresponding to an area of the electronic device to be probed, said substrate having a front surface;

mounting and connecting a second substrate to the front surface of the first substrate, said second substrate having a plurality of flexible contact elements bonded to and extending from a surface thereof;

the flexible contact elements substantially compliantly respond when the flexible contact elements are withdrawn from contacting the electronic component;

urging the first substrate and the electronic device towards one another so that the flexible contact elements make contact with the electronic component so that a free end of the flexible contact elements laterally move when pressed against the area of the electronic device, and the first substrate with the second substrate mounted thereto is mounted to an electrical testing apparatus.

CLAIM 44 (Currently Amended) A method according to any one of claims 29, 33, 34, 36, 37, 42, 43 or 53 to 60, wherein the first substrate with the second substrate mounted thereto is mounted to an electrical testing apparatus by a plurality of electrical connections.

CLAIM 45 (Currently Amended) A probe [[card]] structure comprising an assembly comprising:

[[a probe card;]]

a first substrate having a top surface, a bottom surface, a first plurality of terminals disposed on the top surface, and a second plurality of terminals disposed on the bottom surface;

at least one second substrate having a top surface and a bottom surface;

means for effecting electrical connections between the at least one second substrate and the first substrate;

a plurality of probe elements disposed on the top surface of the at least one second substrate; and

the probe elements are free-standing flexible conductors shaped so that a free end thereof laterally movers when pressed against a surface.

CLAIM 46 (Currently Amended) A [[probe card assembly,]] structure according to claim 45, wherein the probe elements are free-standing flexible conductors.

CLAIM 47 (Currently Amended) A [[probe card assembly,]] structure according to claim 45, wherein ~~tip structures~~ protuberances are ~~mounted to~~ deposed at ends of the plurality of free-standing flexible conductors.

CLAIM 48 (Currently Amended) A [[probe card assembly,]] structure according to claim 45, wherein the free-standing flexible conductor further includes a protuberance at an end thereof.

CLAIM 49 (Previously Presented) A structure comprising:

a plurality of first substrates adapted to be mounted to a second substrate;

each of the first substrate having two opposite surfaces;

free standing flexible conductors extending from one of the two surfaces shaped so that a free end thereof laterally movers when pressed against a surface;

terminals on an other of the two opposite surfaces;

means, within each of the first substrates, for connecting the terminals to the contacts; and

the plurality of the first substrates are mounted on to the second substrate.

CLAIM 50 (Currently Amended) A method according to any one of claims 29, 33, 34, 36, 37, 42, 43 or 53 to 60, further including plurality of groups of said plurality of the flexible electrical contact elements.

CLAIM 51 (Currently Amended) A method according to any one of claims 29, 33, 34, 36, 37, 42, 43 or 53 to 60, wherein there is a least one of said second substrates mounted to said first substrate.

CLAIM 52 (Currently Amended) A method according to any one of claims 29, 33, 34, 36, 37, 42, 43 or 53 to 60, wherein there are a plurality of said second substrates mounted to said first substrate.

CLAIM 53 (Previously Presented) A method according to claim 33 where each of said plurality of flexible contact elements flex and wipe the area of the electronic device when said flexible contacts contact the electronic device; the flexible contact element substantially compliantly respond when the flexible contact element are withdrawn from contacting the electronic device.

CLAIM 54 (Previously Presented) A method according to claim 34 where each of said plurality of flexible contact elements flex and wipe the area of the electronic device when said flexible contacts contact the electronic device; the flexible contact element substantially compliantly respond when the flexible contact element are withdrawn from contacting the electronic device.

CLAIM 55 (Previously Presented) A method according to claim 36 where each of said plurality of flexible contact elements flex and wipe the area of the electronic device when said flexible contacts contact the electronic device; the flexible contact element substantially compliantly respond when the flexible contact element are withdrawn from contacting the electronic device.

CLAIM 56 (Previously Presented) A method according to claim 37 where each of said plurality of flexible contact elements flex and wipe the area of the electronic device when said flexible contacts contact the electronic device; the flexible contact element substantially compliantly respond when the flexible contact element are withdrawn from contacting the electronic device.

CLAIM 57 (Previously Presented) A method according to claim 42 where each of said plurality of flexible contact elements flex and wipe the area of the electronic device when said flexible contacts contact the electronic device; the flexible contact element substantially compliantly respond when the flexible contact element are withdrawn from contacting the electronic device.

CLAIM 58 (Previously Presented) A method according to claim 43 where each of said plurality of flexible contact elements flex and wipe the area of the electronic device when said flexible contacts contact the electronic device; the flexible contact element substantially compliantly respond when the flexible contact element are withdrawn from contacting the electronic device.

CLAIM 59 (Currently Amended) A probe [[card]] assembly according to claim 45 wherein said freestanding flexible conductors are shaped to flex and wipe the area of the electronic device, the freestanding flexible conductors substantially compliantly respond when the flexible contact elements are withdrawn from contacting the electronic component.

CLAIM 60 (Currently Amended) A ~~probe card~~ structure according to claim 49 wherein said freestanding flexible conductors are shaped to flex and wipe the area of the electronic device, the freestanding flexible conductors substantially compliantly respond when the flexible contact elements are withdrawn from contacting the electronic component.

CLAIM 61 (Previously Presented) A method according to any one of claims 53 to 58 wherein the flexible contact elements can be repeatably assembled and disassembled so that said flexible contact element can recontact, reflex and rewipe the area of the electronic device.

CLAIM 62 (Previously Presented) A structure according to any one of claims 59 to 60 wherein the flexible contact elements can be repeatably assembled and disassembled so that said flexible contact element can recontact, reflex and rewipe the area of the electronic device.

CLAIM 63 (Previously Presented) A method according to any one of claims 53 to 58 wherein the rewiped area is an area selected from the group consisting of an area of the same or a different electronic device.

CLAIM 64 (Previously Presented) A structure according to any one of claims 59 to 60 wherein the rewiped area is an area selected from the group consisting of an area of the same or a different electronic device.

CLAIM 65 (New) A structure according to any one of claims 59 or 60, wherein the electronic device is a semiconductor wafer.

CLAIM 66 (New) A structure according to any one of claims 59 or 60, wherein the area of the electronic device is a portion of a surface area of the electronic device.

CLAIM 67 (New) A structure according to any one of claims 59 or 60, wherein there are electrical connections between the second substrates and the first substrate.

CLAIM 68 (New) A structure according to any one of claims 59 or 60, wherein the first substrate is a space transformer.

CLAIM 69 (New) A structure according to any one of claims 59 or 60, wherein the electronic device is a semiconductor wafer; and the flexible contact elements of the second substrate contact individual semiconductor dies on the semiconductor wafer.

CLAIM 70 (New) A structure according to any one of claims 59 or 60, wherein the electronic device is a semiconductor wafer; and the flexible contact elements of the second substrate contacts at least one integrated circuit on the semiconductor wafer.

CLAIM 71 (New) A structure according to any one of claims 59 or 60, wherein the first substrate with the second substrate mounted thereto is mounted to an electrical testing apparatus by a plurality of electrical connections.

CLAIM 72 (New) A structure according to any one of claims 59 or 60, further including plurality of groups of said plurality of the flexible electrical contact elements.

CLAIM 73 (New) A structure according to any one of claims 59 or 60, wherein there is a least one of said second substrates mounted to said first substrate.

CLAIM 74 (New) A structure according to any one of claims 59 or 60, wherein there are a plurality of said second substrates mounted to said first substrate.

CLAIM 75 (New) A structure according to claim 49 wherein said free standing flexible conductors comprise a coating.

CLAIM 76 (New) A structure according to claim 75 wherein said coating is selected from the group consisting of Au, Cr, Co, Ni and Pd.

CLAIM 77 (New) A structure according to claim 76 wherein said free standing flexible conductor comprises gold, gold alloy, copper, copper alloy, aluminum, nickel, palladium and platinum.

CLAIM 78 (New) A structure comprising:

at least one first substrate adapted to be mounted to a second substrate;

said at least one first substrate has two opposite surfaces;

free standing flexible conductors extending from one of the two surfaces shaped so that a free end thereof laterally movers when pressed against a surface;

terminals on an other of the two opposite surfaces;

means, within each of the first substrates, for connecting the terminals to the contacts; and

said at least one first substrate is mounted on to the second substrate.

CLAIM 79 (New) A structure according to claim 78 wherein said freestanding flexible conductors comprise a coating.

CLAIM 80 (New) A structure according to claim 79 wherein said coating is selected from the group consisting of Au, Cr, Co, Ni and Pd.

CLAIM 81 (New) A structure according to claim 80 wherein said free standing flexible conductor comprises gold, gold alloy, copper, copper alloy, aluminum, nickel, palladium and platinum.

CLAIM 82 (New) A structure according to claim 78 wherein said freestanding flexible conductors are shaped to flex and wipe the area of the electronic device, the freestanding flexible conductors substantially compliantly respond when the flexible contact elements are withdrawn from contacting the electronic component.

CLAIM 83 (New) A structure comprising:

a first substrate adapted to be mounted to a second substrate;

the first substrate having two opposite surfaces;

free standing flexible conductors extending from one of the two surfaces shaped so that a free end thereof laterally movers when pressed against a surface;

terminals on an other of the two opposite surfaces;

means, within the first substrate, for connecting the terminals to the contacts; and

the plurality of the first substrates are mounted on to the second substrate.

CLAIM 84 (New) A structure according to claim 83 wherein said freestanding flexible conductors comprise a coating.

CLAIM 85 (New) A structure according to claim 84 wherein said coating is selected from the group consisting of Au, Cr, Co, Ni and Pd.

CLAIM 86 (New) A structure according to claim 85 wherein said free standing flexible conductor comprises gold, gold alloy, copper, copper alloy, aluminum, nickel, palladium and platinum.

CLAIM 87 (New) A structure according to claim 83 wherein said freestanding flexible conductors are shaped to flex and wipe the area of the electronic device, the freestanding flexible conductors substantially compliantly respond when the flexible contact elements are withdrawn from contacting the electronic component.

CLAIM 88 (New) A method according to any one of claims 33, 34, 36, 37, 42, 43, 49 or 53 to 58 wherein said freestanding flexible conductors comprise a coating.

CLAIM 89 (New) A structure according to claim 88 wherein said coating is selected from the group consisting of Au, Cr, Co, Ni and Pd.

CLAIM 90 (New) A structure according to claim 89 wherein said free standing flexible conductor comprises gold, gold alloy, copper, copper alloy, aluminum, nickel, palladium and platinum.